

Boston Logan International Airport

Economy Parking Consolidation Project

Expanded ENF Supplement

1.0 BACKGROUND/PROJECT DESCRIPTION

Over the past decade, parking supply at Boston Logan International Airport (Logan or the Airport) has varied in terms of the specific locations and sizes of individual lots, the mix of parking spaces for air travelers and employee spaces, and the number of spaces in and out of service at any one time. These changes are the result of Massachusetts Port Authority (Massport or the Authority) and Central Artery/Third Harbor Tunnel construction, shifts in the ratio of passengers and employees, and varying demand.

After September 11, 2001, Airport activity levels had been significantly below historical levels. These reduced activity levels offset temporary reductions in on-Airport parking capacity resulting from construction activities. However, since January 2004, this trend has reversed, with passenger levels recovering due to an improving economy and expanded availability of low-cost air fares at Logan. Not surprisingly, this has boosted the demand for on-Airport commercial parking, which increase in demand has coincided with the initiation of the Central Garage rehabilitation and expansion project (EOEA #9790). Due to the complex nature of that project, up to 1,400 existing spaces may be out of service at any given time until the project is completed in the Spring of 2007. In addition, Airport projects such as the new airside North Gate and the replacement general aviation (GA) facility will continue to reduce, and ultimately eliminate, capacity at Logan's two existing primary economy parking lots: Satellite Lot 1 and Satellite Lot 2, both along Prescott Street in the Airport's North Cargo Area.

Employee parking levels have continued to decline, in part due to the substantial increase in Airport employee's use of the Logan Express bus services, and more recently the opening of the new MBTA Blue Line Airport Station.

An adequate supply of parking in proximity to the terminals is essential in order to provide excellent customer service. Furthermore, the expanded presence of low-cost carriers at Logan has caused an increasing demand for lower-cost economy parking options. It is also important to note that commercial parking is an important source of revenue for the Authority, providing financial support to a wide range of activities. Long-range demand forecasts project a need for additional on-Airport parking spaces, even with the addition of new spaces in the expanded Central Garage.

To satisfy customer needs consistent with operating, financial and environmental goals and requirements, the Authority considered a range of alternatives to deal with current on-Airport parking space shortfalls and anticipated parking demands. Massport evaluated peak demand patterns, availability and accessibility of a variety of on-Airport sites, and even the feasibility of constructing a temporary garage. This planning analysis, described in more detail on the following pages, identified the consolidation of economy parking spaces in a new surface parking lot in the Airport's North Service Area as the preferred near-and longer-term option. This lot will be located approximately 1,750 feet north of the existing economy lots along Prescott Street. The MBTA Blue Line tracks separate the site from adjacent neighbors.

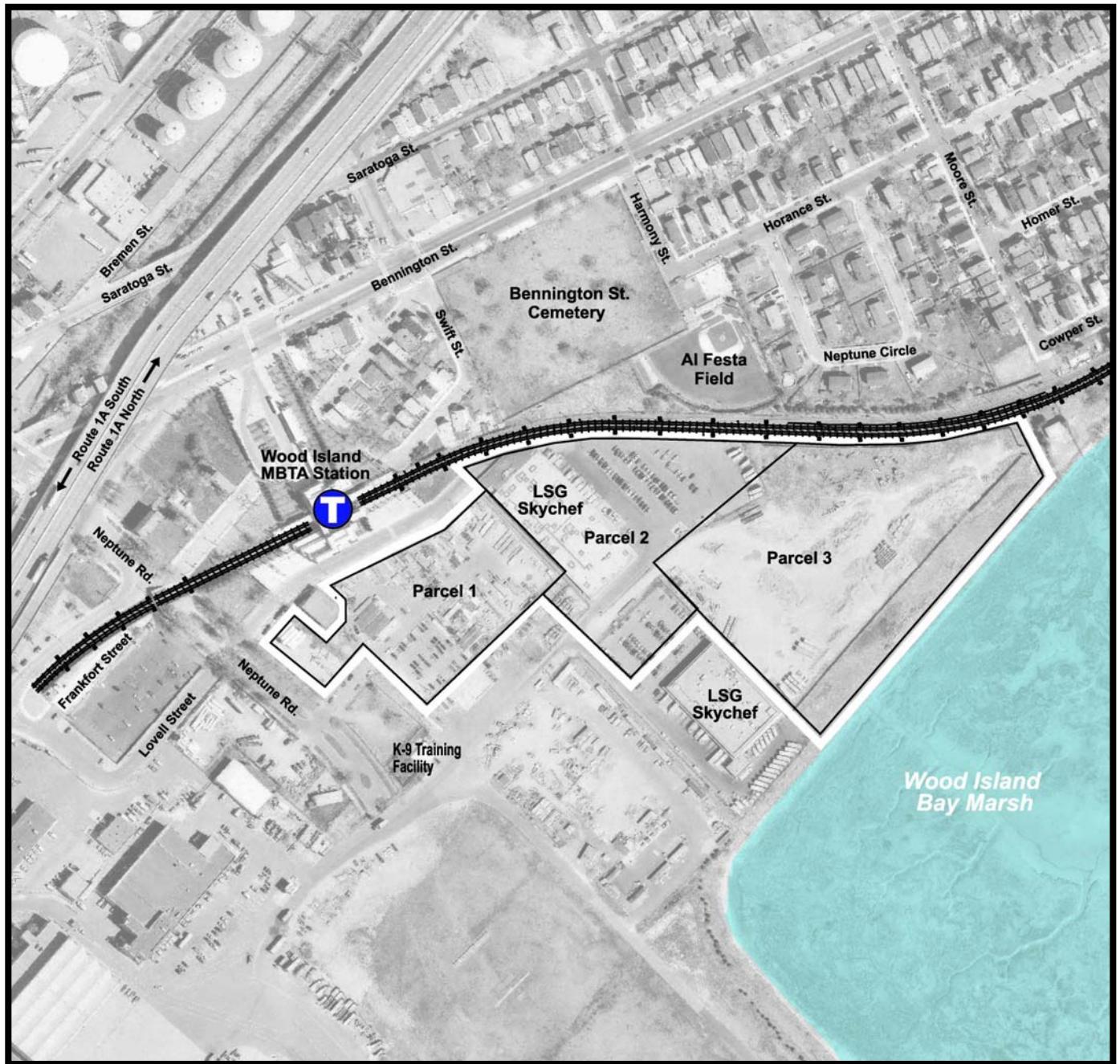
The consolidation of existing on-airport economy spaces will improve customer service for Massport's economy lot users. Historically, MEPA and several advocacy groups have supported the expansion of economy parking facilities at Logan as one mechanism to reduce vehicle miles traveled by encouraging longer on-Airport parking stays. Inadequate on-Airport parking can lead to increases in vehicle-miles-traveled (VMT) from increased pick-up/drop-off activity and use of off-Airport parking. This can also lead to increased curbside congestion and greater vehicular air emissions. Consolidation of parking facilities will reduce shuttle bus vehicle miles traveled and associated emissions.

From a community perspective, economy parking at Logan has been demonstrated to experience much lower levels of activity than Massport's other commercial or employee parking facilities. Using data collected at existing parking lots at Logan, Massport has determined that 59% of parkers at the Central/West Garage complex stay 1 day or less, and 41% park for 2-7 days. By contrast, the majority of parkers at the existing economy lots along Prescott Street park for 3-7 days. Hence, trip generation is substantially lower for Massport's economy lots than would be experienced for employee or commercial short-term parking.

Consolidating three parcels in Logan's North Service Area (NSA) and constructing a new surface parking lot (NSA Economy Parking Lot) on approximately 15.7 acres will provide up to 1750 spaces for economy parking. Figure 1 (included with the ENF Form above) illustrates the project location. Figure 2, included on the following page, is an annotated photograph of existing site conditions.

This project will entail (1) demolishing one LSG Sky Chefs in-flight kitchen building, (2) reusing existing paved parking areas, (3) relocating a Massport equipment storage area, (4) redeveloping the site for economy parking and (5) encircling the new parking lot with a security fence and an attractive landscape area to be designed in consultation with the adjacent neighbors. Figure 3 illustrates Massport's proposed plan for a consolidated economy parking lot. A brief summary of these steps follows.

- 1. Demolish LSG Sky Chefs In-Flight Kitchen.** LSG Sky Chefs currently operates from two buildings in the NSA. They have recently expressed an interest in consolidating those two operations into its one existing facility along Wood Island Marsh. The consolidation would substantially reduce LSG Sky Chefs' operating costs and allow them to respond to the evolving trends in airline food service. Vehicular access to the LSG Sky Chefs site is currently along Lovell Street adjacent to the Wood Island Blue Line MBTA Station. The existing access for LSG Sky Chefs trucks and employee cars (approximately 500 daily trips) is located less than 75 feet from the nearest East Boston neighbor's house. In response to community requests, as part of this project, that access point will be closed and access to the new North Service Area Economy Parking area and the remaining LSG Sky Chefs building will be relocated farther away from nearby residential areas. The lot to be abandoned by LSG Sky Chefs is 4.4 acres, including a 48,400 sf building and approximately 130 parking spaces.
- 2. Parking Area Reuse.** Massport has a lease agreement with the MBTA for use of an approximately 3.0 acre parcel through 2008, with an option for a lease extension of up to 50 years. The site is currently paved and striped for



**Logan Airport North Service Area
Economy Parking Consolidation Project**

EXISTING CONDITIONS

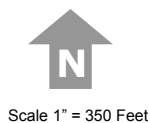
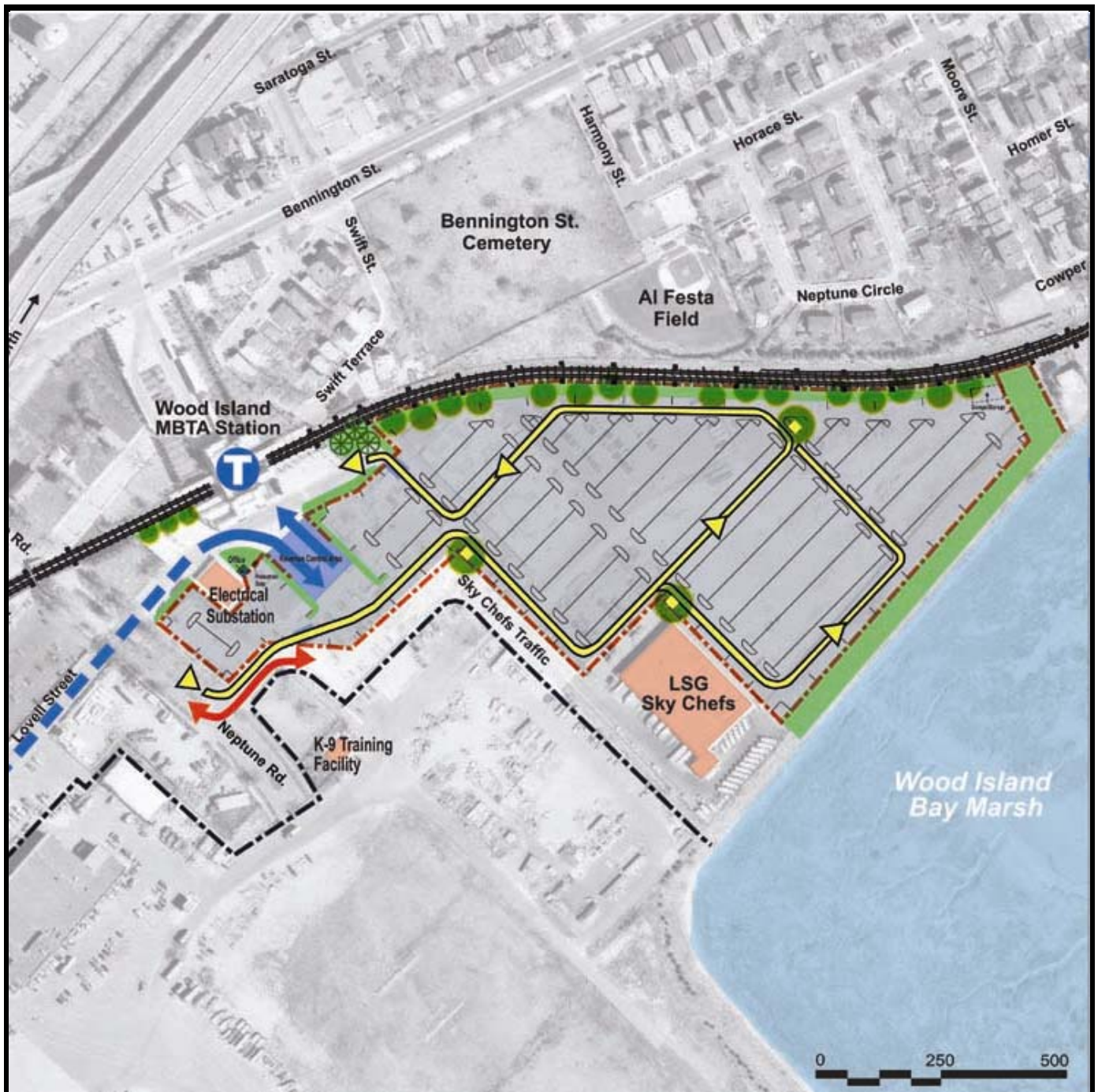


Figure 2



Logan Airport North Service Area Economy Parking Consolidation Project

CONCEPT PARKING PLAN




-  Economy Parking Customer Access/Egress
-  Massport CNG Shuttle Bus Route
-  Sky Chefs Access Egress



Figure 3

approximately 350 spaces. The terms of the lease permit, among other uses, commercial or employee parking.

3. **Relocate Massport Storage Area.** An 8.2-acre parcel has been used by Massport for temporary storage of various Airport-related equipment and construction materials. Approximately 5.5 acres within the parcel has a gravel surface. This area will be graded and paved and a new stormwater drainage and treatment system will be installed to handle runoff from the entire ± 15.7 acre consolidated Economy Parking Lot. Discharge of treated stormwater would be via an existing outfall to Wood Island Marsh. With introduction of the new stormwater management system, the quality of stormwater discharged from the new parking area will be improved over existing conditions. Equipment and materials presently stored in this area will be properly disposed of or relocated to existing storage areas on-Airport.
4. **Redevelop the Site for Commercial Economy Parking.** The project involves redevelopment of three parcels, totaling ± 15.7 acres, into a combined economy parking facility with the capacity for up to 1750 vehicles. The parking areas will include a revenue control gate, landscaping, several transportation center kiosks/ passenger bus shelters, perimeter fencing and lighting designed specifically to minimize neighborhood intrusion. An 8-foot high black-vinyl chain-link fence will encircle the site perimeter. Since areas of the site are striped for parking today, portions of the consolidated economy parking spaces in the North Service Area could be operational by November 2005, though the entire facility would not be completed until spring 2006.

The parcels are relatively flat and will require only minimal grading. Limited site disturbance will also be required for construction of the upgraded stormwater management system. Depending on the final design, some surface stormwater detention features may also be necessary to manage treated discharge from the site during storm events and seasonal high tide events, when groundwater levels are typically at their highest. As described below, an enhanced Airport landscaped edge will be constructed to visually separate the site from the community and to minimize potential lighting impacts.

A new state-of-the-art revenue control system with a combination of pay-on-foot and at-the-gate control booths will be installed. Five (5) entry/exit lanes are planned. Figure 3 details the location of the revenue control/access points that have been strategically positioned to minimize impacts on the nearest residences, while expediting traffic flows.

Other utility infrastructure to be provided will include a fire hydrant system and security equipment. A small storage facility to accommodate a maintenance vehicle, street sweeper and other tools and equipment may be added at a later date. Standard utilities, including water, sewer, power and communications will be extended in underground conduits, as necessary.

5. **Construct Attractive Landscaped Areas.** Two landscaped areas totaling approximately 2.3-acres will be designed and constructed. Along the site's western edge, parallel to the MBTA Blue Line corridor, Massport will construct a

landscaped area approximately 1,400-feet long and 25-feet wide. Design of the landscaped area will be developed in consultation with the adjacent neighborhood. This area will be planted with trees, shrubs, groundcover and groundcover. A conceptual rendering of this landscape area is included as Figure 4.

Figure 4 Rendering of Landscaped Area along MBTA Blue Line



A 50-foot wide vegetated area will remain along the eastern edge of the parcel parallel to the existing rip-rap coastal bank. Depending on the final stormwater management system design, this area could incorporate a vegetated stormwater detention area. Based on preliminary calculations, this basin, if needed, would be designed to remain dry except for periods around major precipitation events. Inspection of the existing 30-inch outfall indicates that the structure is not operating to its capacity and is likely to need repair or replacement. That issue will be resolved during the final design phase of the project and any necessary permits associated with outfall maintenance/repair will be sought at that time.

While delivering superior customer service and maintaining revenue are Massport priorities, the Authority also manages parking supply and operations in a manner consistent with the requirements of the Logan Parking Freeze as well as with the goal of increasing Massport's high occupancy vehicle (HOV) mode share.

- **Parking Freeze:** Massport has consistently complied with the *Logan Airport Parking Freeze* (310 CMR 7.30). The Logan Parking Freeze is set at 20,692 spaces and the NSA economy parking lot will not result in new spaces above that limit. As noted above, the specific location of the spaces and the ratio of in and out-of-service spaces frequently changes; every six months (in March and September) any changes are reported to the MA Department of Environmental Protection (DEP). Additional details concerning the project's consistency with the Logan Parking Freeze are provided below.

- **HOV Goal:** Although parking demand is rebounding, Massport's October 2003 passenger survey demonstrated an increased HOV mode share, indicating growing use of HOV modes. Furthermore, Massport has raised prices of its premium spaces (Terminal B Garage and Central/West Garage), which will tend to dampen demand in several segments of the market. The Authority continues its strong support for Logan Express services, as demonstrated by a recent agreement to lease an additional seven (7) acres at the Braintree Logan Express facility, nearly doubling the amount of available parking. The Authority's strong support is also demonstrated by continued planning for expanded parking at the Framingham site through construction of a parking garage

The components of Logan's current parking situation are summarized below.

Demand - In January 2004, the demand for on-Airport commercial parking began to increase dramatically. This surge in demand can be attributed to several factors:

- Improvements to the regional highway system, primarily the Ted Williams Tunnel, have enhanced vehicle access to Logan Airport;
- An improving economy and the expanded presence of low-cost carriers at Logan have contributed to increases in air travel. Compared to 2003, 2004 air passenger levels increased by 14.7% (or about 3.35 million passengers). Since commercial parking demand is directly related to air passengers, peak parking demands have surged in the last few months; peak parking demand (Tuesday through Thursday) has at times exceeded 2003 levels by 20 to 30%.

Supply - There have been recent losses in on and off-Airport parking resources:

- The privately-owned ParkEx economy parking lot at Bremen Street, which included 1,377 spaces, was eliminated to make way for the Bremen Street Park. In 2000 these spaces were transferred into the Logan Airport Parking Freeze zone but have not yet been constructed.
- Over the past year, approximately 250 spaces were eliminated from the Economy 1 lot off Prescott Street in the North Cargo Area to accommodate relocation and implementation of security enhancements associated with the new airside North Gate. A permanent GA facility is expected to displace the remaining spaces by spring 2006.
- Permitting for redevelopment of the Robie Parcel (Economy Lot 2) for replacement cargo operations was completed in 2000. That site is currently Logan's primary Economy Parking area, totaling about ±800 spaces. Those economy parking spaces will be lost once the site redevelopment commences. Site redevelopment could begin as early as spring 2006. In the event redevelopment of the Robie Parcel is delayed, Massport may elect to continue use of this site during periods of peak parking demand (Thanksgiving, school vacations, etc.). In this event, at no time will Massport exceed the limits set forth in the Logan Parking Freeze, as described below.
- The Central Garage rehabilitation and expansion project began in May 2004. During various phases of the project, up to 1400 spaces will be out of service. The project is planned for completion in 2007.
- Parcel D (unpaved lot adjacent to on-Airport Hyatt Hotel) has, on occasion, been used for up to 400 spaces during temporary overflow conditions, but will not be available after the spring of 2005 due to the Runway 14/32 construction.

CONSISTENCY WITH PRIOR PLANNING

This section discusses the project's compliance with the Logan and East Boston Parking Freezes, the Logan Environmental Status and Planning Reports (ESPR) and Environmental Data Reports (EDR) and other relevant area planning considerations.

Logan Parking Freeze

As noted above, the number of parking spaces at Logan Airport is regulated by the *Logan Airport Parking Freeze* (310 CMR 7.30). The Logan Parking Freeze was first implemented in 1973 as part of the Commonwealth's State Implementation Plan (SIP) under the federal Clean Air Act. The SIP outlines near and long-term state-wide strategies to bring air quality in the Commonwealth in to compliance with the National Ambient Air Quality Standards (NAAQS). Within the Boston area, several parking freezes were established as one of a series of approaches to reducing vehicular emissions.

Based on spaces in service at that time, the Logan Airport Parking Freeze initially set a limit of 19,315 commercial and employee parking spaces. Governing regulations established limits for commercial and employee parking, and allow employee parking spaces to be transferred to the commercial parking pool, but prohibit the reverse. As a result of the 2001 Three-way Land Transfer (ParkEx) and associated buy-out provision (EOEA #12216), an additional 1,377 commercial parking spaces were purchased by Massport and transferred from the East Boston Freeze zone to the Logan Airport Freeze Zone. Accordingly, the current Logan Parking Freeze is now set at 20,692 spaces.

As noted in the introduction, the specific location of the spaces and the ratio of in and out-of-service spaces at Logan frequently changes. Similarly, the ratio of commercial to employee spaces within the cap can also change if employee spaces are permanently converted to commercial parking spaces. Consistent with Massport's goal of reducing employee single occupancy vehicle (SOV) trips, once an employee space is converted to a commercial space, it cannot revert. Massport reports on Parking Freeze compliance bi-annually to the DEP and through Massport's annual EDR or ESPR filings.

As of September 2004, the Parking Freeze tabulation is as follows:

Total Commercial Parking Spaces	15,467
In-Service	11,692
Designated (<i>out-of-service</i>)	3,775
Total Employee Parking Spaces	5,225
In-Service	2,859
Designated (<i>out-of-service</i>)	2,366
<hr/> TOTAL	<hr/> 20,692

The North Service Area economy parking lot will be completed in full compliance with the Logan Airport Parking Freeze. The consolidation of up to 1,750 economy spaces in the NSA will offset current and projected parking space reductions, and will also draw

from some of the Logan's designated spaces not currently in service. With the newly constructed spaces in service, the Parking Freeze tabulation would be adjusted as follows:

Total Commercial Parking Spaces	15,467
In-Service	12,087
Designated (<i>out-of-service</i>)	3,380
 Total Employee Parking Spaces	 5,225
In-Service	2,859
Designated (<i>out-of-service</i>)	2,366
<hr/> TOTAL	<hr/> 20,692

Consistency with the East Boston Parking Freeze. The East Boston Parking Freeze (310 CMR 7.31) applies to the parking of motor vehicles in East Boston. The East Boston Parking Freeze is specifically defined at 310 CMR 7.31(2) to establish a freeze on the availability of Park and Fly parking spaces and Rental Motor Vehicle parking spaces in East Boston (exclusive of Logan Airport property). All other parking spaces are excluded from the East Boston Parking Freeze. Like other Boston area parking freezes, the East Boston Parking Freeze is focused on reducing motor vehicle emissions. The unique elements of the East Boston Parking Freeze relate to the goal of shifting airport and rental car parking from the community to Logan Airport.

Relocation and continuation of the economy parking facilities within the Airport is fully consistent with the goal of keeping Airport parking out of the East Boston community. Furthermore, as described in Section 4, a way-finding/signage program is being carefully planned to direct Economy Lot customers to use Airport and regional roads rather than local streets.

Consistency with the Logan EDR/ESPR. The Logan EDR and ESPRs provide an annual report on environmental conditions at Logan Airport and summarize the status of planning for each of the Airport service areas. Section 3 (Airport Planning) of the 2003 EDR, filed in June 2004, referenced the fact that planning for new commercial parking facilities remained in the feasibility stage. The 2004 ESPR (anticipated to be filed in Fall 2005) will provide an update on any progress made in commercial parking planning and/or development.

Relationship to Massport's HOV mode share policy and goals. As part of its Environmental Policy, Massport established a goal of a 35.2% high occupancy vehicle (HOV) mode share by the time Logan annual passenger levels reached 37.5 million. Logan handled 22.8 million passengers in 2003. In October 2003, Massport conducted a passenger survey, which demonstrated that Airport passengers are using HOVs for nearly 33% of their trips. This is an increase from 30.7% reported in the last survey in 1999 and the highest HOV mode share since that ground access category has been tracked. Furthermore, it is important to highlight that Massport has achieved this higher passenger HOV percentage at a much lower passenger level than was used for the initial goals projection.

Relationship to 1984 Logan North Area Development Policy

On April 19, 1984, the Massport Board voted to adopt the *Logan North Area Development Policy* (1984 Policy). The “North Area” defined in that Policy included three parcels (A-1, A-2 and B), totaling approximately 17.5 acres in Logan’s North Service Area. As the 1984 Policy indicates, Parcels A-1 and A-2 are roughly equivalent to the current NSA Parcel 3. North Area Parcel B included the current NSA Parcel 1 and the adjacent LSG Sky Chefs building site. The area currently identified as NSA Parcel 2 was not included in the 1984 Policy. The 1984 Policy is in effect until April 2009 and was adopted to clarify the Authority’s position with respect to the parcels following relocation of a number of Neptune Road residents.

The 1984 Policy (included as Appendix E) outlined a design review process, described access guidelines, and enumerated a series of general development guidelines for parcel development. The 1984 Policy continued by describing land use development options for Parcel A-1, Parcel A-2 and Parcel B. For example, the 1984 Policy envisioned primarily employee parking on Parcel A; a 24-hour post office on Parcel A-2; and freight forwarders, food service or rental car parking on Parcel B. Other uses with equivalent environmental impacts on the nearby neighborhood were also envisioned following a design review process with the neighborhood. The proposed economy parking use of these NSA parcels is anticipated to result in a reduction of community impacts compared to the uses envisioned in 1984 because economy customers are longer-term parkers than employees. Furthermore, economy parking would not produce the truck noise and activity associated with a 24-hour post office operation.

The Authority has begun a community planning process consistent with the 1984 Policy. In addition, with the filing of this ENF, Massport is continuing the community consultation process for the proposed land use.

Relationship to 1997 Agreement Regarding Airport Edge Buffers

In August, 1997, Massport entered into an agreement with Airport Impact Relief, Inc. and Friends of Belle Isle Marsh, Inc. with respect to the process by which Massport expected to plan for and design airport edge buffer areas at four locations adjoining Logan Airport. Of the four buffer areas envisioned in 1997, the Bayswater Embankment Airport Edge Buffer has been completed. Massport expects to begin construction of the Phase I Southwest Service Area (SWSA) Buffer in the summer of 2005. Planning for the Phase 2 SWSA Buffer has remained under review, awaiting a better definition of potential Airport projects on adjacent land. Work on the Navy Fuel Pier Airport Edge Buffer is moving forward following completion of soil remediation by the U.S Army Corps of Engineers and selection in late 2004 of a design team for the project.

Planning for the buffer area anticipated to run along the boundary of the North Service Area and Wood Island Bay Marsh was suspended at the request of the neighborhood during a community planning process in accordance with the 1997 agreement. Currently, Massport and Air Inc. are exploring other Airport areas for consideration as a North Service Area Airport buffer.

The NSA Economy Parking Consolidation Project will include some landscape areas contemplated within the 1997 Agreement with respect to the North Service Area. A 25-

foot landscaped area will be constructed between the MBTA Blue Line right-of-way and the paved parking areas of the Economy Parking Consolidation Project to buffer adjacent neighbors. The MBTA Blue Line tracks themselves operate as an important visual and physical barrier between the proposed economy parking area and the community located on the opposite side of the MBTA tracks. A vegetated 50-foot setback between the paved portions of the proposed parking areas and the edge of Wood Island Bay Marsh will be maintained. Additionally, Massport owns and maintains significant areas along the community side of the MBTA tracks including the Al Festa Little League Field and adjacent open space.

2.0 ALTERNATIVES TO THE PROJECT

In evaluating near- and longer-term Logan parking solutions, a series of alternative strategies was evaluated, including the use of other Airport sites, construction of a temporary or permanent garage on existing parking lots and no-action. The evaluation of alternative sites resulted in the determination that no other site existed on the Airport that could be developed to supply the number of parking spaces needed during parking shortfall periods over the next 5± years. Because of the immediate and near-term parking shortages, construction of a garage was found not to meet the project schedule. While there are a number of smaller, separate parcels that would be available at different times, the consolidation of economy parking facilities to a single location significantly enhances the efficiency of the operation and minimizes the need for additional bus routes, personnel and infrastructure. A single location also will reduce vehicle miles traveled and associated air emissions.

Relocation of the economy parking to the North Service Area offers the opportunity to shift segments of the LSG Sky Chefs operation away from the community, including truck and employee traffic and loading dock operations. Together with the proposed landscaping and site design elements, environmental impacts on nearby residents from economy parking operations in the NSA are likely to improve over existing conditions.

Under the NSA no-build scenario, there would be no substantial change in operations in the North Service Area. Parcel 1 would remain as parking lot; Parcel 2 would likely remain in use by LSG Sky Chefs and Parcel 3 would remain an unimproved equipment storage and occasional construction staging area. There would be no drainage or landscape improvements. Since the existing economy parking lots along Prescott Street are in within 1,750-feet of the proposed economy lot, no substantial changes in traffic distribution would be expected.

Absent construction of the NSA economy parking facility, Logan parking demand would need to be met elsewhere on and off Airport, with the potential for increasing vehicular trips through Day Square in East Boston to the remote parking lot in Chelsea or other privately-owned parking lots in the vicinity.

In response to community suggestions at the two public meetings (January 25, 2005 and February 8, 2005), Massport has made several adjustments to the initial concept. This has included separation of the bus access/egress locations to reduce traffic on Lovell Street, extension of the buffer plantings adjacent to the Wood Island Station, and

additional plantings within the parking lot. Massport has also agreed to consider early implementation of the landscaped edge along the MBTA Blue Line rail corridor.

Massport was asked by the community to consider an on-airport parking garage. It was suggested that a parking structure in the NSA might reduce the size of a surface lot and provide additional green space. A parking garage in the NSA was found to be an unsuitable alternative for several reasons, as follows: (1) the 1984 Community Agreement contemplated only surface parking and (2) the immediate need for parking could not be served by the schedule to fund, design and construct a parking garage.

3.0 DESCRIPTION OF EXISTING CONDITIONS/USES

As described in the Introduction, the proposed NSA Economy Parking Lot is comprised of three parcels totaling approximately 15.7 acres. A description of the three parcels and their existing uses follows.

Parcel 1: 3.0 Acre Parking Area.

Massport has an existing lease agreement with the MBTA for use of portions of this 3.0 acre parcel through 2008, with an option for an extension of up to 50 years. A majority of the site is currently paved and striped for approximately 350 spaces.



Parcel 2: 4.4-Acre LSG Sky Chefs in-flight kitchen. LSG Sky Chefs currently operates two buildings in the NSA. They recently expressed an interest in consolidating those operations into one existing facility. The lot is 4.4 acres, including a 48,400 sf building and approximately 130 parking spaces. Employees



and trucks currently access both existing LSG Sky Chefs buildings through a control gate on Parcel 2, that is located between the MBTA Blue Line track corridor and the LSG Sky Chefs building. This point is approximately 50-feet from the nearest Swift Terrace residence.

Parcel 3: 8.2-acre Massport Storage Area. An 8.2-acre parcel is used by Massport for temporary storage of Airport-related equipment and materials. About 5.5 acres of this area has a gravel surface. Equipment and materials presently stored in this area will be properly disposed of or relocated to existing storage areas on-Airport.



4.0 Transportation/Traffic Management

Massport seeks to limit Airport impacts on local roadways, particularly in the Day Square area of East Boston. Since this group of intersections currently experiences congestion during peak periods, Massport carefully evaluated the potential impacts of relocating consolidated economy parking lot to the proposed NSA location. Key to this planning was a detailed Level of Service analysis of nearby intersections, existing and proposed access/egress routes and potential transportation effects.

As described below, the proposed economy parking facility can be implemented without adverse local or on-Airport roadway impacts. The analysis demonstrates that overall traffic patterns to and from the new economy lot will not differ substantially from those used to access the two existing nearby economy parking areas off Prescott Street in the North Cargo Area. Furthermore, as a result of relocating vehicular access to the LSG Sky Chefs facility, the existing flight kitchen truck access point and associated traffic closest to the Swift Terrace neighborhood is eliminated. Shifting this activity away from the nearby residences is expected to improve the community air quality and reduce noise impacts associated with those truck trips.

Understanding that the potential use of local roads by economy parking users is a strong concern within the community, Massport has developed a comprehensive on- and off-Airport roadway signage plan with the specific goal of discouraging use of local roadways by customers of the consolidated Economy Parking lot. This plan is outlined below.

4.1 Existing Roadway Conditions

Existing traffic conditions in the project area were documented by analyzing eleven (11) intersections that had some potential to be affected by relocation of Economy Parking within the North Service Area. The 11 study area intersections are listed below and are illustrated in Figure 5:

- Hotel Drive (SR-10) and North Service Road (SR-2)
- North Gate/Route 1A Northbound (NB) Off Ramp and Frankfort Street
- Lovell Street and Frankfort Street
- Neptune Road and Route 1A NB Off Ramp/Vienna Street
- Neptune Road and Route 1A Southbound (SB) On Ramp

- Neptune Road and Bennington Street
- Neptune Road and Bremen Street
- Neptune Road and Saratoga Street
- Swift Street/Route 1A NB Off Ramp and Saratoga Street
- Bennington Street and Swift Street
- Chaucer Street and Curtis Street/Route 1A NB On Ramp

Turning movement counts (TMCs) were collected at all 11 study intersections to identify the weekday AM and PM peak hours. Since many travelers return from trips on Sunday, Massport also collected counts to determine the Sunday evening peak hour.

The counts were reviewed to determine the peak hours and volumes for each peak period. The peak hours at all project intersections were determined to be 7:45-8:45 AM and 5-6 PM during the weekday. The Sunday peak hour was determined to be 3-4 PM. The raw count data are included in Appendix A.

The peak hour volumes were adjusted to reflect the average monthly conditions using a seasonal adjustment factor. The seasonal factor was developed using data from the nearest MassHighway permanent count station, located on Route 1A in Revere 0.3 kilometers north of Boston City Line. Figures 3, 4, and 5 in the Traffic Impact Study (Appendix B) show the 2004 existing weekday AM, PM, and Sunday peak hour volumes, respectively.

4.1.1 2004 Existing Conditions Capacity Analysis Results

The next step in the impact analysis is to determine the existing Levels of Service at each of the intersections that may be affected by the proposed project. Level of Service (LOS) is an indicator of how well or how poorly an intersection operates.

The analysis takes into account traffic volumes, number of lanes, type of control (e.g., stop signs or traffic signals), as well as other factors. LOS is a qualitative measure that describes operational conditions and quality of service. Six levels of service are defined and expressed in letter designations with an “A” representing the best operating condition and an “F” the worst. For this traffic impact study, all study area intersection approaches were analyzed to determine their LOS. Intersections were analyzed using *Synchro 5.0*; this computer modeling program uses procedures consistent with the Transportation Research Board methodology. *Copies of all Traffic Impact Analysis technical appendices are available upon request from Massport.*

Level of Service Criteria

Level of Service	Signalized Intersection Criteria		Unsignalized Intersection Criteria	
	Average Stopped Delay (seconds/vehicle)		Average Total Delay (seconds/vehicle)	
A	≤10		≤10	
B	10.1 to 20.0		10.1 to 15.0	
C	20.1 to 35.0		15.1 to 25.0	
D	35.1 to 55.0		25.1 to 35.0	
E	55.1 to 80.0		35.1 to 50.0	
F	>80.0		>50.0	



All study area intersection approaches currently operate at Level of Service (LOS) D or better during the AM peak hour.

During the PM peak hour, movements at several intersections are currently operating poorly. They are:

- The Route 1A North Off Ramp approach at the intersection of Neptune Road and Route 1A North Off Ramp/Vienna Street operates at LOS F in the PM peak hour.
- The Neptune Road northbound approach at the intersection of Neptune Road and Saratoga Street also operates at LOS F.
- Additionally, the Neptune Road northbound approach at the intersection of Neptune Road and Bennington Street operates at LOS E during the PM peak hour.

All other existing study area intersection approaches operate at LOS C or better during the PM peak hour. During the Sunday peak hour, the Neptune Road northbound approach at the intersection of Neptune Road and Saratoga Street operates at LOS E, while all other study area intersection approaches operate at LOS C or better. The existing conditions capacity analysis results for weekdays are summarized in Table 4-1.

4.1.2 Future Roadway Conditions

2010 No Build Traffic Volumes

The Executive Office of Environmental Affairs (EOEA) requires analysis of a five-year planning horizon. In keeping with this approach, 2010 was determined to be the project design year. The 2004 existing traffic volumes were grown to represent 2010 future conditions. The MassHighway permanent count station located on Route 1A in Revere 0.3 kilometers north of Boston City Line was reviewed to determine the growth factor. For this study, a one percent per year background growth rate, compounded annually, was applied to the 2004 base volumes to calculate the 2010 design volumes. The 2010 No Build AM, PM and Sunday peak hour volumes are shown in Figures 6, 7, and 8, respectively, in the Traffic Impact Study (Appendix B).

Planned Roadway Improvements

In order to estimate future levels of service accurately, it is necessary to account for any anticipated changes that will occur to the study area roadway. Within the Airport roadway system, there are several sections of the Central/Artery Tunnel (CA/T) project that are scheduled for completion within the next year. These include a new Inbound Roadway (1A NB A-D) from the Callahan Tunnel (Route 1A North) and Service Road 14 (SR-14) connecting the new MBTA Airport Station to Harborside Drive. The CA/T project will also construct new signals at the intersection of the Route 1A North Off Ramp/Vienna Street and Neptune Road. The new signal will be interconnected and coordinated with the traffic signal at Bennington Street and Neptune Road. Additionally, an actuated uncoordinated signal will be constructed at the intersection of Frankfort Street and North Gate/Route 1A Northbound Off Ramp. These improvements are included in both the 2010 No Build and Build analysis.

Table 4-1 Existing Levels of Service (LOS)

Location	AM Peak		PM Peak	
	LOS	Delay (sec)	LOS	Delay (sec)
Signalized: Hotel Drive (SR-10) and North Service Road (SR-2)				
Intersection	C	30.1	B	16.1
Unsignalized: Frankfort Street and North Gate/Route 1A Northbound Off Ramp				
Frankfort Street WB Left/Thru	A	1.5	A	2.2
North Gate NB Left/Right	B	10.8	B	12.0
Route 1A NB Off Ramp SB Left	B	14.1	C	24.2
Route 1A NB Off Ramp SB Thru/Right	A	9.9	A	9.9
Unsignalized: Frankfort Street and Lovell Street				
Frankfort Street EB Left/Thru/Right	A	1.1	A	0.0
Frankfort Street WB Left/Thru/Right	A	1.3	A	1.7
Lovell Street NB Left/Thru/Right	B	13.0	C	15.5
Lovell Street SB Left/Thru/Right	B	13.0	B	13.9
Unsignalized: Route 1A NB Off Ramp/Vienna Street and Neptune Road				
Route 1A NB Off Ramp EB Left/Thru/Right	C	22.4	F	429.5
Neptune Road SB Left/Thru	A	0.3	A	0.4
Signalized: Bennington St. and Neptune Road				
Intersection	B	15.4	C	24.1
Unsignalized: Bremen Street and Neptune Road				
Bremen Street EB Left/Thru/Right	B	13.1	B	14.5
Bremen Street WB Left/Thru/Right	C	16.2	C	20.6
Neptune Road NB Left/Thru	A	0.2	A	0.4
Neptune Road SB Left/Thru/Right	A	0.2	A	0.2
Unsignalized: Saratoga St. and Neptune Road				
Saratoga Street EB Left/Right	A	0.2	A	0.1
Neptune Road NB Thru/Right	D	32.4	F	208.7
Neptune Road SB Left/Thru	A	0.0	A	0.0
Unsignalized: Saratoga Street and Swift Street				
Swift Street EB Left/Thru/Right	B	10.7	C	18.5
Route 1A Off Ramp WB Left/Thru/Right	B	10.6	B	13.5
Saratoga Street NB Left/Thru/Right	B	10.1	B	12.6
Saratoga Street SB Left/Thru/Right	B	11.5	C	20.7
Signalized: Bennington Street and Swift Street				
Intersection	B	11.7	B	17.5
Unsignalized: Chaucer Street and Curtis Street				
Chaucer Street EB Left/Thru/Right	A	7.4	A	7.0
Chaucer Street WB Left/Right	A	2.0	A	3.5
Curtis Street NB Thru/Right	B	12.3	B	13.7

2010 No Build Conditions Capacity Analysis Results

During the AM peak hour, the Neptune Road northbound approach at the intersection of Neptune Road and Saratoga Street will operate at LOS E. All other No Build study area intersection approaches will operate at LOS D or better during the morning peak hour.

During the PM peak hour, the Neptune Road northbound approach at the intersection of Neptune Road and Saratoga Street will operate at LOS F. All other existing study area intersection approaches operate at LOS D or better during the PM peak hour. During the Sunday afternoon peak hour, the Neptune Road northbound approach at the intersection of Neptune Road and Saratoga Street operates at LOS E, while all other study area intersection approaches operate at LOS C or better.

The 2010 No Build conditions capacity analysis results are summarized in Table 4-2. The 2010 No Build conditions capacity analysis computer output referenced as Appendix C of the traffic report are available upon request from Massport.

2010 Build Condition

The next step in the traffic impact analysis was to estimate future conditions with the proposed project. In order to do this, it was necessary to first estimate the amount of new trips that will be generated by the proposal, distribute these trips on the roadway network, add the volumes to the 2010 No Build and then conduct a capacity analysis of the build condition. The methodology and analysis are detailed in the following section

Trip Generation

Logan Airport air passengers and employees generate traffic trips. Parking lots themselves are not primary trip generators; rather they service uses that generate trips. To quantify the number of vehicles using this proposed lot, the Airport's existing Economy 2 parking lot was monitored over four peak periods. Based on this monitoring, we developed a trip generation rate for the weekday AM and PM peak hours as well as the Sunday peak hour.

The raw data and trip rate calculations are included in Appendix D in the Traffic Impact study. For this analysis, the trip rates were then applied to an 1,800-space lot (whereas the planned lot is projected to provide up to 1,750 spaces). The trip generation is summarized in Table 4-3. The trip generation calculations referenced as Appendix E of the attached Traffic Report are available upon request from Massport.

Table 4-3 Trip Generation

Weekday						Sunday		
AM Peak Hour			PM Peak Hour			Peak Hour		
IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
56	14	70	84	43	128	37	66	103

Table 4-2 No-Build Results

Location	AM Peak				PM Peak				Sunday Peak			
	LOS	Delay (sec)	v/c	95% Queue	LOS	Delay (sec)	v/c	95% Queue	LOS	Delay (sec)	v/c	95% Queue
Signalized Intersection: Hotel Drive (SR-10) and North Service Road (SR-2)												
Intersection	C	30.7	0.48	-	B	17.6	0.66	-	C	20.9	0.51	-
Signalized Intersection: Frankfort Street and North Gate/Route 1A Northbound Off Ramp												
Intersection	A	8.0	0.23	-	B	10.2	0.51	-	A	8.9	0.18	-
Unsignalized Intersection: Frankfort Street and Lovell Street												
Frankfort St. EB Left/Thru/Right	A	1.1	0.03	2	A	0.0	0.00	0	A	0.0	0.00	0
Frankfort St. WB Left/Thru/Right	A	1.3	0.02	2	A	1.8	0.02	2	A	2.2	0.02	1
Lovell Street NB Left/Thru/Right	B	13.5	0.11	10	C	16.4	0.14	12	B	11.4	0.14	12
Lovell Street SB Left/Thru/Right	B	13.4	0.04	3	B	14.5	0.03	2	A	9.7	0.01	1
Signalized Intersection: Route 1A Northbound Off Ramp/Vienna Street and Neptune Road												
Intersection	C	16.8	0.33	-	C	21.1	0.51	-	B	17.3	0.34	-
Signalized Intersection: Bennington Street and Neptune Road												
Intersection	C	23.1	0.73	-	C	24.5	0.66	-	B	15.2	0.44	-
Unsignalized Intersection: Bremen Street and Neptune Road												
Bremen Street EB Left/Thru/Right	B	13.6	0.03	2	C	15.3	0.01	1	B	12.4	0.01	1
Bremen Street WB Left/Thru/Right	C	17.2	0.28	29	C	22.7	0.42	50	C	15.3	0.23	22
Neptune Road NB Left/Thru	A	0.2	0.00	0	A	0.4	0.01	1	A	0.2	0.01	0
Neptune Road SB Left/Thru/Right	A	0.2	0.00	0	A	0.2	0.00	0	A	0.5	0.01	1
Unsignalized Intersection: Saratoga Street and Neptune Road												
Saratoga Street WB Left/Right	A	0.2	0.00	0	A	0.1	0.00	0	A	0.2	0.00	0
Neptune Road NB Thru/Right	E	42.7	0.81	185	F	283.1	1.53	680	E	46.0	0.82	184
Neptune Road SB Left/Thru	A	0.0	0.00	0	A	0.0	0.00	0	A	0.0	0.00	0
Unsignalized Intersection: Saratoga Street and Swift Street												
Saratoga St. EB Left/Thru/Right	B	11.2	0.34	-	C	21.8	0.68	-	B	13.5	0.48	-
Saratoga St. WB Left/Thru/Right	B	11.1	0.33	-	B	14.8	0.44	-	B	10.8	0.27	-
Swift Street NB Left/Thru/Right	B	10.4	0.21	-	B	13.6	0.37	-	B	10.7	0.26	-
Rt. 1A Off Ramp SB Left/Thru/Right	B	12.1	0.43	-	D	25.6	0.76	-	B	12.6	0.47	-
Signalized Intersection: Bennington Street and Swift Street												
Intersection	B	12.2	0.49	-	C	24.4	0.69	-	A	9.9	0.32	-
Unsignalized Intersection: Chaucer Street and Curtis Street												
Chaucer Street EB Left/Thru/Right	A	7.4	0.15	13	A	7.1	0.16	14	A	7.5	0.21	20
Chaucer Street WB Left/Right	A	1.9	0.01	0	A	3.5	0.01	1	A	1.2	0.00	0
Curtis Street NB Thru/Right	B	12.6	0.01	1	B	14.2	0.04	3	B	11.7	0.02	2

Notes:

95th percentile volume exceeds capacity, queue may be longer.

M Queue length metered by upstream signal

Trip Distribution

Once the trip generation estimate is completed, it is necessary to assign the trips to the roadway network. This was done based on the 2003 Logan Air Passenger Survey of all users of on-Airport parking. At the time of the survey, on-Airport parking includes Central Parking, Terminal B parking, and Economy parking. A new surface parking lot in front of Terminal E has recently opened. The major gateways identified during the development of the trip distribution were I-90, Callahan/Sumner Tunnels, and Route 1A. Development of the trip distribution does not include “kiss and fly” drop-off vehicles. The results of the trip distribution were checked against and found to be consistent with the 2003 Environmental Data Report (EDR) developed by Massport. The trip distribution was also consistent with a distribution developed using the license plate survey data for the North and West Garages at Logan Airport in September 2004. The trip distribution is shown in Table 4-4 and schematically depicted on Figure 6.

Table 4- 4 Trip Distribution

To/From Route	Percent
Route 1A	8.2%
I-90	50.6%
Callahan/Sumner Tunnel	41.2%
Total	100.0%

Source: 2003 Logan Ground Access Air Passenger Survey

2010 Build Condition Capacity Analysis Results

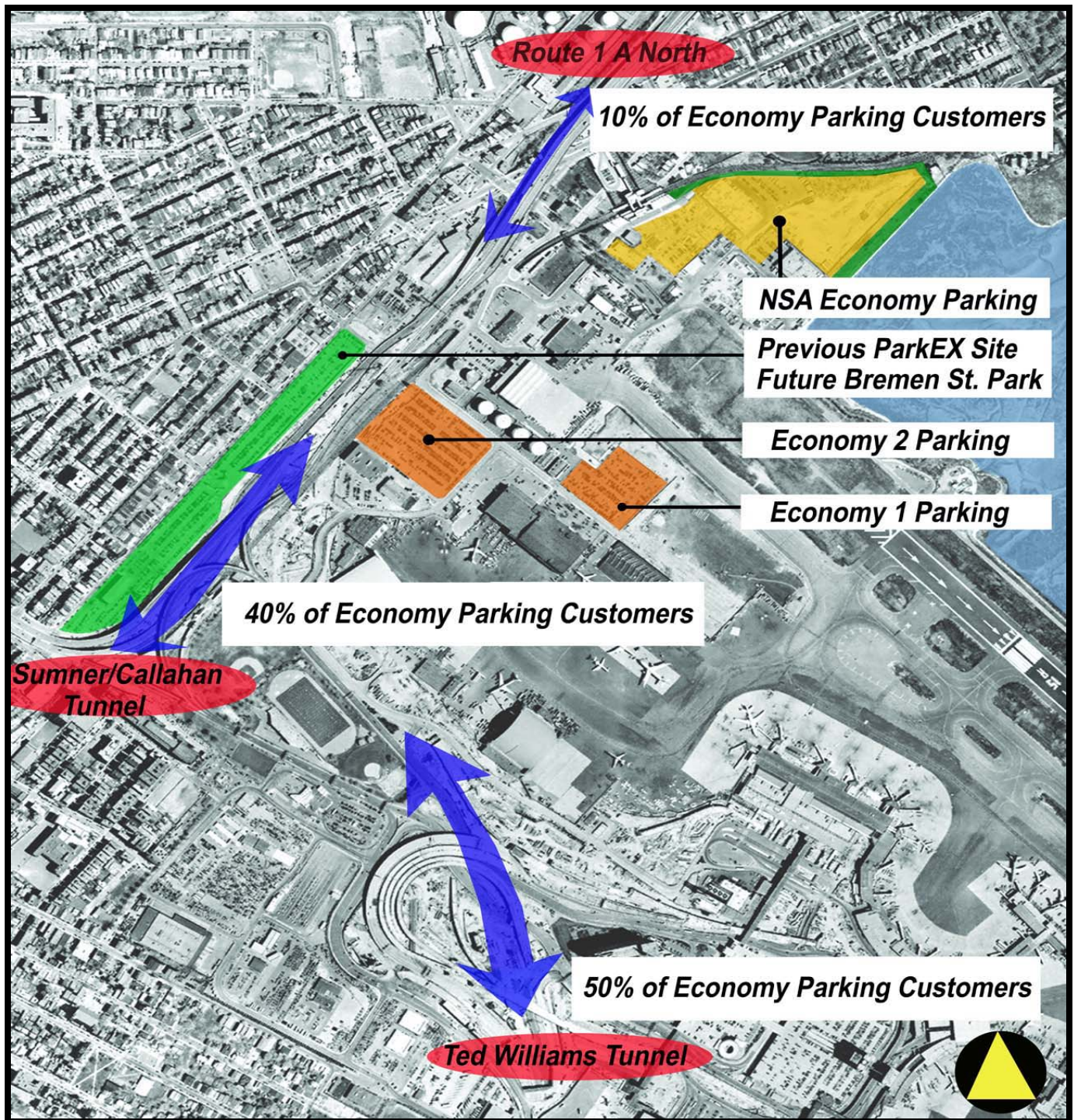
The final step in the impact analysis is to re-analyze the study area intersections after the build traffic has been assigned to the roadway network. The 2010 Build LOS can then be compared to the 2010 No Build LOS to identify any project impacts. The results are presented below and summarized on Table 4-5.

At the following 2010 Build study area intersections, all approaches will operate at LOS D or better during the AM peak hour:

- Hotel Drive (SR-10) and North Service Road (SR-2)
- Frankfort Street and North Gate/Route 1A NB Off Ramp
- Frankfort Street and Lovell Street
- Route 1A Northbound Off Ramp/Vienna Street and Neptune Road

During the PM peak hour and the Sunday peak hour, these intersections will all operate at LOS C or better. The operation of all other study area intersections will be identical to the respective operation in the 2010 No Build Conditions. These intersections were not re-analyzed, since no trips related to the NSA parking lot will travel through them.

The 2010 Build conditions capacity analysis results are summarized in Table 4-5 along with the 2010 No Build results. The 2010 Build conditions capacity analysis computer output is available upon request.



**Logan Airport North Service Area
Economy Parking Consolidation Project**

TRAFFIC DISTRIBUTION



Not to Scale

SOURCE: Vollmer Associates LLP (2004)

Figure 6

Table 4-5 – Capacity Analysis Summary

Location	2004				2010 No Build				2010 Build			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Signalized: Hotel Drive (SR-10) and North Service Road (SR-2)												
Intersection	C	30.1	B	16.1	C	30.72 8.1	B	17.6	C	29.7	B	17.8
Unsignalized: Frankfort Street and North Gate/Route 1A Northbound Off Ramp												
Frankfort Street WB Left/Thru	A	1.5	A	2.2								
North Gate NB Left/Right	B	10.8	B	12.0								
Route 1A NB Off Ramp SB Left	B	14.1	C	24.2								
Route 1A NB Off Ramp SB Thru/Right Intersection	A	9.9	A	9.9								
					A	8.0	B	10.2	B	12.2	B	11.3
Unsignalized: Frankfort Street and Lovell Street												
Frankfort St. EB Left/Thru/Right	A	1.1	A	0.0	A	1.1	A	0.0	A	1.0	A	0.0
Frankfort St. WB Left/Thru/Right	A	1.3	A	1.7	A	1.3	A	1.8	A	1.3	A	1.9
Lovell St NB Left/Thru/Right	B	13.0	C	15.5	B	13.5	C	16.4	B	14.9	C	22.2
Lovell St SB Left/Thru/Right	B	13.0	B	13.9	B	13.4	B	14.5	B	14.3	C	16.0
Unsignalized: Route 1A NB Off Ramp/Vienna St. & Neptune Rd												
Route 1A NB Off Ramp EB Left/Thru/Right	C	22.4	F	429.5								
Neptune Road SB Left/Thru Intersection	A	0.3	A	0.4								
					C	16.8	C	21.1	C	16.6	C	21.4
Signalized: Bennington Street and Neptune Road												
Intersection	B	15.4	C	24.1	C	23.1	C	24.5	C	23.1	C	24.5
Unsignalized: Bremen Street and Neptune Road												
Bremen St. EB Left/Thru/Right	B	13.1	B	14.5	B	13.6	C	15.3	B	13.6	C	15.3
Bremen St. WB Left/Thru/Right	C	16.2	C	20.6	C	17.2	C	22.7	C	17.2	C	22.7
Neptune Rd NB Left/Thru	A	0.2	A	0.4	A	0.2	A	0.4	A	0.2	A	0.4
Neptune Rd SB Left/Thru/Right	A	0.2	A	0.2	A	0.2	A	0.2	A	0.2	A	0.2
Unsignalized: Saratoga Street and Neptune Road												
Saratoga Street EB Left/Right	A	0.2	A	0.1	A	0.2	A	0.1	A	0.2	A	0.1
Neptune Road NB Thru/Right	D	32.4	F	208.7	E	42.7	F	283.1	E	42.7	F	283.1
Neptune Road SB Left/Thru	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Unsignalized: Saratoga Street and Swift Street												
Swift Street EB Left/Thru/Right	B	10.7	C	18.5	B	11.2	C	21.8	B	11.2	C	21.8
Rt 1A Off Ramp WB Left/Thru/Right	B	10.6	B	13.5	B	11.1	B	14.8	B	11.1	B	14.8
Saratoga St NB Left/ Thru/ Right	B	10.1	B	12.6	B	10.4	B	13.6	B	10.4	B	13.6
Saratoga St SB Left/Thru/Right	B	11.5	C	20.7	B	12.1	D	25.6	B	12.1	D	25.6
Signalized: Bennington Street and Swift Street												
Intersection	B	11.7	B	17.5	B	12.2	C	24.4	B	12.2	C	24.4
Unsignalized: Chaucer Street and Curtis Street												
Chaucer Street EB Left/Thru/Right	A	7.4	A	7.0	A	7.4	A	7.1	A	7.4	A	7.1
Chaucer Street WB Left/Right	A	2.0	A	3.5	A	1.9	A	3.5	A	1.9	A	3.5
Curtis Street NB Thru/Right	B	12.3	B	13.7	B	12.6	B	14.2	B	12.6	B	14.2

4.1.3 Economy Parking Lot Entering and Exiting Routes

Massport seeks to avoid/minimize impacts of Airport-related traffic on East Boston and Chelsea local streets. This goal will be achieved primarily by utilizing the regional and Airport roadway networks. Additionally, to insure that the project would not adversely affect existing roadway capacity, each route was planned to minimize the number of vehicles required to travel through signalized intersections. In that exercise, a series of preferred access/egress routes have been analyzed and determined to meet those objectives.

The following text briefly summarizes the current access and egress routes to existing economy parking lots and then describes the overall access plan to the proposed new NSA economy parking lots. Figure 7 schematically illustrates existing and proposed entering and exiting routes.

Existing Entering Routes to Economy Parking

Two economy parking lots currently exist within the North Cargo Area along Prescott Street, within 1,750 feet of the proposed North Service Area lot. The larger of the two lots (Economy 2 with 660 spaces) is located at the intersection of Prescott and Frankfort Streets; the Economy 1 lot (with 220 spaces) is located to the east of Economy 2, adjacent to the new North Gate. As recently as three years ago, approximately 1,400 spaces existed in these two lots

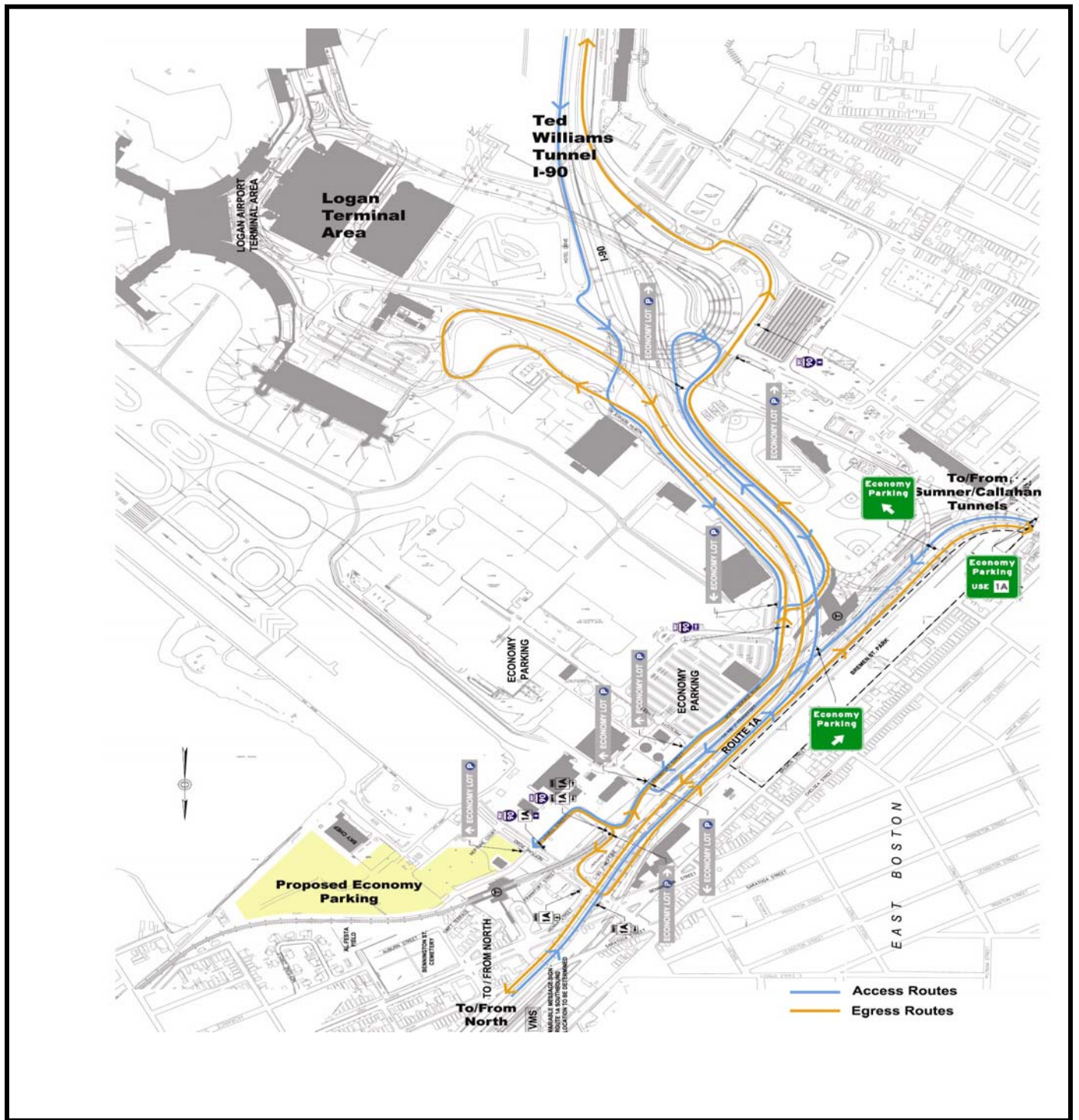
Traffic entering the Airport from the Ted Williams Tunnel (TWT/I-90 East) and destined for the existing economy parking lots uses the Logan Airport exit ramp (Exit 26) from I-90. Once on the ramp, economy parkers are directed to Hotel Drive, then onto North Service Road (SR-2). Motorists follow the new North Service Road to Prescott Street, at which they turn right to reach the two economy parking lots.

From the Callahan Tunnel (Route 1A Northbound), motorists destined for the existing economy parking use Logan's new Arrivals Level roadways to SR-13, that is located between the Central and West Garages. From there, they turn left onto SR-11. At the intersection with Hotel Drive, drivers turn right and continue to North Service Road. They turn left onto North Service Road then turn right onto Prescott Street, where the economy parking lots are located.

A vehicle entering Logan Airport from Route 1A Southbound and destined for economy parking follows a similar route to those from 1A Northbound, using the Arrivals level roadway, SR-13, SR-11, and the North Service Road.

Existing Exiting Routes from Economy Parking to Regional Highways

Because there is no signing for regional highways such as Route 1A, I-90, or I-93, it is expected that vehicles will exit Economy parking via the same route by which they entered. Since all signing for Economy parking is on-Airport, it is expected that vehicles will follow a route back toward the terminals via Frankfort Street and North Service Road.



**Logan Airport North Service Area
Economy Parking Consolidation Project**

**ACCESS/EGRESS ROUTES
w/Wayfinding Signage**



Not to Scale

SOURCE: Vollmer Associates LLP

Figure 7

Proposed Entering Routes to new Economy Parking Lots

A comprehensive signing plan will route trips directly from gateway routes to Economy Parking or through terminal area roadways to Economy Parking.

Traffic entering the Airport from TWT/I-90 Eastbound and destined for Economy Parking would continue to use the existing route. The route would be extended to direct a motorist to continue north on SR2-North Service Road/Frankfort Street. The motorist then would turn right onto Lovell Street, cross Neptune Road, and enter the proposed lot from Lovell Street.

A vehicle entering Logan Airport from Route 1A Southbound and destined for economy parking would be directed to exit Route 1A South onto the Inbound Roadway. From the Inbound Roadway, the motorist would use Ramp 1A-S. At the intersection of Ramp 1A-S/Porter Street and Harborside Drive/SR-14, the motorist would turn right onto SR-14. A motorist would follow SR-14 to its northern terminus at North Service Road and turn left onto North Service Road. North Service Road becomes Frankfort Street. From Frankfort Street, the motorist would turn right onto Lovell Street, cross Neptune Road, and enter the proposed lot from Lovell Street.

A motorist entering the Airport from the Callahan Tunnel and destined for economy parking would continue north on Route 1A, exiting onto Frankfort Street opposite North Gate. The motorist would then turn left onto Frankfort Street and would then turn right onto Lovell Street, cross Neptune Road and enter the proposed lot.

Proposed Exiting Routes from new Economy Parking Lots

Traffic bound for Route 1A Southbound (via the Sumner Tunnel) would exit the proposed economy parking lot via Lovell Street and cross Neptune Road. The motorist would continue on Lovell Street and turn right onto Frankfort Street. Once on Frankfort Street, the motorist would then turn left back onto Neptune Road and be directed under Route 1A. The motorist may then access Route 1A Southbound via the Route 1A South On Ramp, just south of the intersection of Neptune Road and Bennington Street. Route 1A South grants motorists access to the Sumner Tunnel and points south.

Traffic bound for I-90 West (via TWT) and I-93 South would exit the proposed Economy lot via Lovell Street and cross Neptune Road. The motorist would be directed to turn left onto Frankfort Street, which turns into North Service Road and then SR-2. The motorist would bear right off of North Service Road onto SR-14. At Porter Street, SR-14 becomes Harborside Drive. The motorist would follow Harborside Drive until they reached the entrance for the TWT, which is located at the intersection of Harborside Drive and Jeffries Street. I-93 South is accessed from I-90.

Traffic bound for Route 1A North would exit the proposed economy lot via Lovell Street and cross Neptune Road. The motorist would be directed to turn left onto Frankfort Street, which turns into North Service Road. At the intersection of Hotel Drive and North Service Road, the motorist would continue straight toward Terminal E and bear right onto the Egress Roadway, which provides access to Route 1A North and points north.

Massport will encourage travelers to access and egress the site as described in the above paragraphs through the use of a comprehensive sign and wayfinding plan. To the extent possible, fixed signs and variable message signs will be placed at strategic locations to direct economy lot customers onto the regional highway and Airport roadway system. However, it is realistic to expect that travelers may become familiar with alternate routes that use local streets. These travelers may already use alternate routes.

Traffic Management Action Plan

To limit and/or mitigate the potential impacts of adding any additional vehicles to local streets and intersections, Massport has developed an action plan to monitor and manage traffic flow to and from the new economy parking facility. As warranted, subject to a comparative review of the “No-Build” and “Build” traffic conditions, Massport has proposed additional traffic mitigation measures described in Actions #2 and #3, below. Key elements of the plan are as follows:

1. **New Signage.** Install signage to direct travelers to use the regional/Airport roadway system.
2. **Peak Hour Control Access/Egress Measures.** Massport will install a “*No Left Turn 7 AM to 9 AM*” sign on the southbound Frankfort Street approach at Lovell Street to discourage customers from the north from using Neptune Road/Day Square. Massport will install a “*No Right Turn 4 PM to 6 PM*” on the Lovell Street approach to Frankfort Street. PM Peak hour trips would then be prohibited from turning right and traveling through the Day Square area.
3. **Traffic Control Monitoring.** Massport will monitor these locations in order to ensure adherence to peak hour access/egress measures and to alert Massport Public Safety and operations staff and State Police of accidents or other incidents that require an emergency response.

5.0 DESCRIPTION OF EXISTING ENVIRONMENT/ASSESSMENT OF IMPACTS

As described above, nearly 40% of the existing site is currently paved, covered by buildings, or used for aviation-related industrial and construction activities, including parking. The remainder of the site contains highly compacted soils/gravel and areas of vegetation and is used for storage of a range of construction materials and vehicles.

Redevelopment of these parcels is expected to have a positive environmental impact as a result of (1) improved drainage and enhanced stormwater quality; (2) reduced community noise due to the relocation of industrial activities away from the nearby residences; (3) a slight improvement in nearby community air quality due to roadway improvements that have been designed to reduce truck queuing near residences; and (4) attractively designed and maintained landscaped areas. A portion of the existing vegetated strip along Wood Island Bay Marsh may be converted to a vegetated detention basin to enhance the quality of stormwater runoff to the marsh and harbor resources. The basin would remain dry in all but extreme storm events.

The following discussion describes current and projected natural resource site conditions.

5.1 Water Quality/Stormwater Management

The following sections document existing site drainage and describe proposed improvements to manage future site runoff and enhance water quality discharged from the site. Discussions of the project's consistency with DEP stormwater guidelines and the policies and principles of the Massachusetts Office of Coastal Zone Management (MCZM) are also included.

Existing Site Drainage. The three NSA parcels share two existing drainage areas. The runoff from Parcel 1 and the rooftop of the existing building on Parcel 2 flows to the south and into an existing 48-inch diameter reinforced concrete pipe (RCP) drain line in Neptune Street. This system flows to the west eventually discharging to the Porter Street outfall adjacent to the Hyatt Conference Center along Harborside Drive. The existing Parcel 1 drainage system is made up of 12-inch diameter RCP drain lines that discharge to the 48-inch drain in Neptune Street. Rooftop drainage is delivered to the Neptune Street sewer via a 10-inch diameter RCP line running along the west side of the parcel.

The balance of the runoff generated on Parcel 2 (non-rooftop runoff) and all Parcel 3 runoff drains to the east and is discharged to the tidal marsh area. Inlets (catch basins) are present in the parking lot area of Parcel 2, but only two inlets are shown on Parcel 3. Existing drain lines on Parcel 2 range in size from 10-inches to 24-inches in diameter. The lines on Parcel 3 are primarily 30-inches in diameter.

The existing vegetated area between the developed portion of Parcel 3 and the tidal marsh is slightly higher in elevation than the developed area itself. The drainage in this area appears to be largely contained to the site proper. This collected runoff appears to slowly find its way into the limited number of inlets on the property, infiltrate or evaporate. Any runoff from the grassed area is assumed to drain to the tidal wetlands via overland flow.

Added to the storm water discharges generated from the three NSA parcels is the discharge from the adjacent north campsite section of the Logan airfield near runway end 15R. This property lies to the immediate south of Parcel 3 and contributes flow to the existing outfall location via a 30-inch diameter pipe. It is the combined flow from Parcels 1, 2 and 3, and of the North Campsite which constitutes the discharge to the adjacent tidal wetlands. Existing drain lines on the North Campsite range in size from 8-inches to 30-inches in diameter.

The outfall to the existing tidal marsh is indicated on existing plans to be a 30-inch diameter RCP line. Field inspection shows that this pipe has deteriorated over time and the flapper valve is not fully functional. It is expected that this 30-inch outfall structure will need repair or replacement.

There currently is no end-of-pipe treatment (oil/water removal system) on the discharge stream. Some of the inlets in the existing parking areas were inspected and found to be currently equipped with oil separator hoods.

Proposed Storm Water Management Improvements. From a stormwater management perspective, there will be two significant changes. First, the gravel area will be paved, creating an additional approximately 5.5 acres of impervious parking area. The second will be the construction of a comprehensive stormwater collection and management system. To compensate for the additional impervious area and to improve the quality of water discharged from the site, a series of water quality enhancement features have been incorporated into the design and operational plans. These features are described below.

Storm waters generated on the project site must be collected, treated and discharged in a manner consistent with the Massachusetts Storm Water Management Policies and Standards. To this end, the collection and treatment of these waters must employ Best Management Practices (BMPs) in an attempt to remove at least 80% of the theoretical concentration of suspended solids in the storm waters. A variety of BMPs are available to meet this and other goals of the storm water management policies. The BMPs will be designed to treat at least the first inch of runoff volume.

A brief description of the proposed improvements within the two drainage areas follows. Supplemental stormwater management materials are included in Appendix C.

- **Neptune Road/Porter Outfall System.** A majority of the parcel 1 and 2 drainage areas is currently paved. A slight change to the volume and rate of discharge to the Neptune Road storm sewer will result due to paving of a roughly ½ acre parcel along Neptune Road. Collection of generated runoff from the area tributary to the existing drain line in Neptune Road will continue much as it is today via catch basins with sumps and hooded outlets. To the extent it is necessary to modify or reconstruct the existing drainage lines to accommodate the new parking grading and configuration, these changes will be made. Inlets will be deep sump catch basins with hooded outlets. These inlets will be connected to a closed pipe system that will convey collected flows to an oil/water/grit separator unit located on the line prior to the discharge to the Neptune Road storm sewer. These BMP features will result in improved runoff water quality compared to existing conditions.
- **Discharges to the Tidal Outfall.** With the exception of a possible vegetated detention area, the vegetated buffer along the water's edge and the landscaped edge along the MBTA Blue Line corridor, Parcel 3 will be converted to paved parking. All runoff generated on Parcel 3 will be collected and discharged via a closed drainage system. The runoff from Parcel 3 will be captured, controlled and treated in order to comply with the Massachusetts Storm Water Management Policies and Standards.

For the water being discharged to the tidal marsh, peak rate control is not required under the DEP Storm Water Policies and Standards, provided there is no adverse impact upon the adjacent tidal marsh system from changes in the discharge rate. Since drainage from this site is currently untreated, the runoff quality is expected to be improved as a result of this project.

Flow from Parcel 3 will be collected in a newly constructed storm water collection system using deep sump catch basins with hooded outlets. As part of final design, the volume and footprint of any surface retention structure and other details of the stormwater management system will be finalized. At this EENF phase of the project, Massport has conservatively estimated the size of a retention basin potentially to be included as part of the project design. As design proceeds, it is likely that the size and shape or need of this feature will evolve. In any event, the final project design will fully comply with the DEP Stormwater guidelines.

The collected flow will be delivered to an oil/water separator for treatment prior to discharge. Because of the relatively large size of the area and flat nature of the site, it is presently envisioned that more than one separator unit may be desirable, but this will be confirmed during the final design process. All treated storm flows will be directed to the discharge location of the existing 30-inch diameter outfall sewer, with eventual discharge to the tidal marsh at this location.

Although construction of the retention basin for storage and treatment prior to discharge is being considered as part of the current stormwater management proposal, the potential exists for future review of the outlet sizing. Preliminary analysis suggests that there may be an opportunity to eliminate or reduce the size of the retention basin and accommodate additional parking if the outfall pipe were increased from the current 30-inch diameter to 48 or 60-inches. Such a drainage modification would only be pursued if it could be demonstrated that the changes resulted in no adverse environmental impacts. It is important to note, however, that reduction or even the elimination of a retention basin would not increase the parking capacity above the 1750 space maximum referenced earlier.

Snow Management. Typically, snow is stored on paved surfaces where room is available. If snow piles become too large, a portable snow melter will be used to reduce the piles. Melted snow is discharged to a catch basin.

As a best management practice, snow piles will be maintained outside of the wetlands buffer zone. Machine melted snow will be discharged to a catch basin upstream of the water quality treatment structures.

5.2 Wetland Resource Areas

No wetlands will be filled as part of the NSA economy parking consolidation project. The area of Parcel 3 to be paved as part of the project is already primarily covered with a gravel surface. A 50-foot wide vegetated area will be maintained along Wood Island Bay Marsh.

The majority of Parcels 1 and 2 are paved and/or covered by building. One unpaved area near Neptune Road has been used for construction staging, including soil storage. There are no regulated wetland resource areas on Parcels 1 or 2. Parcel 3 is located along a section of Wood Island Marsh approximately 700-feet in length. A coastal salt marsh (Wood Island Bay Marsh) dominated by *Spartina alterniflora* is found immediately seaward (east) of Parcel 3. One unnamed tidal creek handles runoff from upland areas, including parcels 2 and 3. There is a rip-rap bulkhead running the length of the

parcel, which forms the coastal bank in this area. There is one 30-inch outfall structure with a flapper gate along this section of the bulkhead. The bulkhead is approximately 5-6 feet high in this area. At the top of the bulkhead is a vegetated band approximately 100-feet in width. This area is coincident with the 100-foot buffer zone associated with the coastal bank. Vegetation in the buffer zone area is primarily grasses and several small trees, such as staghorn sumac, which have become established along the shoreline. The entire North Service Area parking site is above 100-year flood elevation of 9.5-feet MSL (mean sea level).

Several isolated areas of Parcel 3 support hydrophytic vegetation. One area is within the vegetated buffer area and is dominated by the invasive tall reed, *Phragmites australis*. It appears that this isolated area of *Phragmites* exists due to occasional surface ponding which is likely the result of highly compacted soil conditions. A second isolated area existing in the middle of the unpaved parcel is similarly dominated by *Phragmites*, though some Purple Loosestrife (*Lythrum salicaria*) is also present. The third area is along the MBTA Blue Line right-of-way, where *Phragmites* are intermixed with trembling aspens (*Populus tremula*) and goldenrod (*Solidago graminifolia*).

In each case, the presence of periodic ponded water and hydrophytic vegetation appear to be the results of highly compacted urban fill of mixed origin that lead to poor drainage. As described in an August 25, 2004 letter from BSC (contained in Appendix D), these isolated areas do not constitute regulated resource areas at the state level. Historical documentation suggested the potential for these areas meeting federal resources designation. Field investigations conducted in support of this EENF demonstrated that the areas do not meet federal definitions due to the lack of hydric soils (see Appendix D).

The project will not involve any work in Wood Island Bay Marsh. Based on an inspection of the existing 30-inch outfall pipe, some repair and/or reconstruction may be necessary. Repair of the structure would require temporary disturbance of the rip-rap coastal bank. Portions of the existing vegetated band may be converted to a vegetated retention basin and any debris would be removed. In the event that the retention basin could be reduced or limited as a result of design improvements, a vegetated buffer of at least 50-feet in width will be maintained at the top of the bank. Any areas of bare ground in this area will be established with native, low maintenance grasses.

A key consideration in designing the stormwater management system for the new parking areas was the enhancement of water quality discharged to Wood Island Bay Marsh. Currently, Parcel 3 is entirely unimproved, roughly graded and covered with a mix of gravel and miscellaneous soil materials. Accordingly, this site is subject to uncontrolled wind and water erosion and stormwater runoff. Furthermore, when vehicles and other equipment are stored in this area, there is the potential for release of oil and related fluids. The existing stormwater drainage system does not incorporate any treatment systems. The proposed stormwater management system will comply with DEP's stormwater management standards.

5.3 CZM Consistency

The NSA consolidated Economy Parking parcels are located within the Coastal Zone. Although no federal permits are required, a summary of the project's consistency with relevant Coastal Zone Management policies and principles is provided.

- **Water Quality.** Stormwater runoff for the project area is presently directed to one outfall that discharges to Wood Island Bay Marsh. Approximately one-half of the site is currently unimproved, consisting primarily of a gravel surface. In the developed condition, a new stormwater management system will be installed to control runoff from the site. Together with the best management practices (BMP) to be employed at the site, stormwater quality will be enhanced through the use of oil/water separators and sedimentation structures. No new outfalls are proposed.
- **Habitat/Protected Areas.** The project site is currently in use for parking and construction storage/staging activities. The area does not contain any protected areas nor does it serve as a significant wildlife habitat. The project will, however, result in an improvement of the quality of stormwater runoff to a coastal salt marsh.
- **Coastal Hazards.** The project will not affect the site's beneficial function in terms of storm damage prevention and flood control. There will be no changes to the existing riprap coastal bulkhead or filling of floodplain that would affect their functions and values.
- **Public Access.** The project area is presently a restricted area within the Airport boundary and thus no public access to the waterfront in the area is allowed. With parking in this area, users of the secured parking lots will have views of Wood Island Bay Marsh and associated coastal resources areas, though no direct access to the waterfront will be possible since the parking lot will be secured.
- **Growth Management.** The site has been used for a range of Airport-related uses over the past several decades. These uses include flight kitchens, construction staging, vehicle parking, including buses, and heavy equipment storage, among other related activities. The western boundary of the parcels is formed by the MBTA Blue Line corridor which separates the site from the adjacent residential community. An attractive airport landscaped edge will be constructed to visually separate the site from the community and to minimize potential lighting impacts.

5.4 Noise

Ambient sound levels in the Airport's North Service Area are generated by a variety of sources and sound levels can vary substantially throughout a 24-hour period. Sources of noise in the NSA include Logan aircraft activity, primarily that associated with the MBTA Blue line and Wood Island Station; Runway 15R/33L arrivals and departures; flight kitchen truck and mechanical equipment operations; and roadway traffic and construction activity, among others.

Conversion of this area from a construction staging, storage, parking and flight kitchen area to economy surface parking lot has been planned in a manner to have minimal impact to the adjacent residential community. Furthermore, the change in use is

expected to yield some potential noise benefits. A discussion of noise issues associated with the project follows.

The two primary noise generators in the area, the MBTA Blue Line and aircraft operations will be unchanged by use of the NSA for long-term economy parking. During daytime hours, with parking in the NSA, the noise environment will continue to be dominated by these two sources and roadway traffic. A secondary noise source in this area is the existing flight kitchen operations immediately adjacent to the MBTA Blue Line tracks. Demolition of this building will eliminate noises associated with the truck docks, rooftop mechanicals, dumpster/trash compactors, truck back-up warning systems, etc.

The 1984 Logan North Area Development Policy envisioned a variety of airport-related uses including employee and rental car parking, freight forwarding, flight kitchens as well as a replacement U.S. Postal Service complex. Each of these activities typically operates 24-hours per day. Though the economy lot would be open at all times, Massport's experience at the current economy lots along Prescott Street confirm that the primary hours of operation are between 5 am and midnight. Early morning activity corresponds to passengers arriving in sufficient time to clear security before their flights. Late night parking activity typically is over by midnight, after the last flights are scheduled to arrive. This activity pattern is different than employee parking which often occurs around the clock. Similarly, rental car activity is a 24-hour operation. Accordingly, conversion of the NSA to a long-term commercial parking facility is expected to result in not only a narrower window of activity but also lower levels of activity than other potential uses for the site. These elements will be a benefit in terms of community noise exposure.

One issue that has been raised in community discussions is the effectiveness of the existing LSG Sky Chefs building as a community noise barrier, and the potential effect of removing the building. While a building can be an effective noise barrier in certain configurations, several factors minimize the value of the existing building for noise buffering. These factors include the minimal height of the building, its distance from existing noise sources, and the slight rise in ground elevation of the adjacent residential areas. Furthermore, due to close proximity to the MBTA Blue Line corridor (within 25-feet), the flight kitchen building may also reflect some track noise.

The LSG Sky Chefs building is approximately 25-feet high and roughly 2,000 feet from the end of Runway 15R/33L. The combination of the low building height, distance from the runway and the relatively high height of the large jet engines, serve to significantly diminish the potential value of the existing structure as an Airport noise buffer. Secondly, a more prominent noise factor associated with the existing flight kitchen is the location of the truck loading docks along the community (north) face of the building. Discussions with the Logan Airport Noise Office indicate that there are periodic community complaints about this truck dock noise. As noted previously, the existing truck access point and associated noise is less than 50-feet from the nearest residence.

While the flight kitchens operate 24-hours per day, their peak activities are between 4:30 am (in preparation for the early morning departures) and 10:30 pm (servicing the last departures of the day). Consolidation of the flight kitchen operations to the existing building to the east will provide two noise benefits. First is the simple increase in

distance from the community of the truck and overall building activity, particularly those early morning operations. Additionally, the loading docks on the second LSG Sky Chefs building where activity will be consolidated are positioned on the east side of the building, facing the airfield. In this location, all loading dock activity is shielded from the community by the flight kitchen.

Together, the increased distance and shielding would be expected to substantially reduce the community noise impact of flight kitchen activities. While the volume of flight kitchen traffic would not be expected to vary as a result of the consolidation of operations, as discussed earlier, access to the site will be relocated away from the current location immediately adjacent to the MBTA Blue Line rail corridor. This will further reduce the noise impact of flight kitchen activity on the adjacent residential community.

Noise Summary/Conclusions

In summary, planning for the new consolidated economy parking lot has incorporated several design features to minimize adverse noise impacts on the community, as follows:

1. Relocates flight kitchen access to the NSA parcels away from the community and positions the new entrance/revenue control area across from the Wood Island MBTA Station rather than the Swift Terrace residences.
2. Relocates flight kitchen operations, including truck loading docks and the primary vehicular access gate further away from the community. Truck docks are shielded from the closest residences
3. The long-term nature of economy parking will reduce the number of vehicular trips and associated noise as compared to other “permitted” land uses such as a post office and employee or rental car parking facilities
4. Commercial parking activities do not typically occur throughout the night as do both employee parking and rental car uses. Therefore, the operating hours of this site will be more similar to the adjacent MBTA Blue Line activity and heavier Airport operating periods.

5.5 Air Quality

Conversion of the site to long-term economy parking has the potential to change air quality conditions in several ways. The consolidation of parking to the North Service Area will necessarily move some vehicular traffic from the existing economy lots at other areas of the Airport to the new parking facility. From an overall perspective, emissions at the Airport will not change as a result of the project; however, the distribution of emissions will slightly shift.

The traffic analyses presented in Section 4.2 demonstrates that all signalized intersections will operate at an overall acceptable level of service, that is, C or better (LOS). Based on this finding, we would not anticipate changes in traffic-related air quality conditions.

A potential community air quality benefit would be relocation of the LSG Sky Chefs access gate and loading dock operations away from the community. Currently, the

main access point to the LSG Sky Chefs building on Parcel 2 is immediately adjacent to the MBTA Blue Line tracks, which is within 50 feet of the closest Swift Terrace residences. The existing loading docks are approximately 200 feet from the nearest residences along Swift Terrace. With the proposed plan in place, access to LSG Sky Chefs service area will be approximately 400 feet away from the nearest residences. Similarly, the LSG Sky Chefs loading dock operations will be nearly 800 feet away from Swift Terrace and separated from that community by the building and the active MBTA Blue Line tracks.

5.6 Lighting

Parking facility lighting will be designed to minimize community impact. To the maximum extent practicable within the context of safety and security, lighting will be oriented away from the community. Low profile, cut-off type lights will be used.

5.7 Construction Impacts

Construction of this new economy parking area will involve three distinct elements: (1) demolition of existing structures, (2) conversion of the site to a modern economy parking facility, and (3) construction of landscape areas. As described in previous sections, approximately 40% of the site is currently paved, portions of which today are used for parking. Together with the relatively level site topography, and the existing pavement, only limited site regrading is expected.

Comprehensive soil erosion and sediment control plans and rodent control plans will be implemented at the outset of construction and maintained throughout the construction phase.

Any regulated soils identified during construction will be handled in accordance with the MA Contingency Plan (MCP). Similarly, the existing underground fuel storage tank and dispensing equipment on Parcel 2 will be removed in accordance with all applicable federal, state and local regulations.

5.8 Landscape Areas

As part of the planning process for the NSA parking, Massport will develop attractive landscape edges along the MBTA Blue Line tracks that will provide a natural separation for the NSA Economy Parking Lot from the adjacent neighbors along Swift Terrace and Neptune Circle. Massport is also considering the feasibility of constructing the landscape areas as one of the initial construction elements. In addition, Massport will continue to maintain the Al Festa Field and associated buffer areas north of the MBTA Blue Line tracks between the NSA and the community.

6.0 PERMITS/REGULATORY COMPLIANCE

Redevelopment of portions of the North Service Area for commercial economy parking will require a series of environmental permits and/or approvals. In addition, the project must demonstrate compliance with the Logan Parking Freeze. The following section lists anticipated environmental reviews.

Federal Regulatory Reviews

NEPA – Categorical Exclusion

COE Section 404 – Maintenance/repair of existing outfall is eligible for a Category 1 (non-reporting) Programmatic General Permit.

NPDES - Outfall modifications/Construction/operations

State Regulatory Reviews

MEPA – greater than 5 acres impervious area, mandatory ENF

MA Wetlands Protection Act – work within the coastal bank (outfall repair) and buffer zone requires filing of a Notice of Intent (NOI) with the Boston Conservation Commission

Water Quality Certification (WQC) – to be handled through the NOI process

DEP Stormwater Guidelines – As part of the NOI/WQC process, project will demonstrate consistency with DEP Stormwater guidelines

Logan Parking Freeze – demonstration of compliance

7.0 MITIGATION/BENEFICIAL MEASURES

The North Service Area parking plan integrates a range of design and operational measures developed to improve environmental quality and reduce community impacts as compared to existing and alternative site uses. The key design goal was to develop an efficient and attractive parking operation that minimized activities close to the community that had potential air quality and noise impacts. Another primary goal was to improve the quality of stormwater discharged to Wood Island Bay Marsh. Although the project design and environmental factors have been described in preceding sections, project beneficial measures are summarized below.

1. Project design consolidates existing flight kitchen traffic and truck dock activities away from nearby residences – all loading docks and vehicular access points are oriented away from residences.
2. Economy parking activity tends to be longer term than employee parking and reduces late night/early morning movements. Using data collected at existing parking lots at Logan, Massport has determined that 58% of parkers at the Central/West Garage complex stay 1 day or less, and 40% park for 2-7 days. By contrast, a majority of parkers at the existing economy lots along Prescott Street park for 3-7 days. Hence, trip generation is substantially lower for Massport's economy lots than would be experienced for employee or commercial short-term parking.
3. The proposed economy parking use is expected to have less impacts as compared to alternate airport activities envisioned in the 1984 North Area Development Policy.

4. Customer access/egress has been positioned to be visually shielded by the Wood Island MBTA Station and new landscaped areas. The site entrance area also will be landscaped.
5. Truck access to the remaining LSG Sky Chefs building has been relocated away from the current location to minimize community noise and air quality impacts of those operations.
6. A 25-foot wide irrigated landscaped edge will be constructed along the parking lot edge that parallels the MBTA Blue Line tracks.
7. Extensive improvements to the site drainage system will be installed to improve the quality of water discharged to Wood Island Bay Marsh and the Porter Street Outfall.
8. A 50-foot wide vegetated area will remain along Wood Island Bay Marsh.
9. Site lighting will be installed and operated to minimize impacts on adjacent residences.
10. A security system will monitor site activities.
11. A state-of-the art revenue control system will be operated to minimize queuing and maximize access/egress efficiencies.
12. A comprehensive access/egress signage program is proposed to direct Economy Parking customers away from neighborhood streets.
13. Massport will implement a Traffic Management Action Plan as described in Section 4.1.2 which is designed to guide economy parking customers away from local streets, including Day Square.

8.0 COMMUNITY OUTREACH

In development of this economy parking consolidation plan, Massport held a series of informal and formal agency and community meetings to present the initial concept and solicit input from elected officials and adjacent neighbors, particularly those closest to the project site. Massport's Office of Government and Community Affairs (OGCA) coordinated several briefings for elected officials on the proposed economy parking consolidation plan. Since mid-November, the Director of Government and Community Affairs and Massport's Manager of Transportation Planning, have briefed the local City Councilor, State Representative, and State Senator. In addition, a site walk was also conducted for the chief aide to the district's Congressman. Two similar briefings were held with City of Boston officials during the same period of time. The focus of these meetings with the Deputy Commissioner of the Boston Transportation Department (BTD) and the principal BTD planner for East Boston were traffic planning and potential impacts on neighborhood streets. An additional meeting on all project aspects was also held with the Mayor's Office of Neighborhood Services Representative and a senior city official from East Boston who advises the Mayor on transportation issues.

On January 25, 2005 Massport hosted a meeting at the Savio Prep High School in the Harborview neighborhood of East Boston which is adjacent to the North Service Area and the proposed economy parking consolidation project. Massport sent a direct mail invitation to the meeting to approximately 150 people who live in homes directly abutting or in very close proximity to the NSA, and extended invitations to all of the above-mentioned public officials. Massport engineers, environmental and traffic analysts, and planning staff joined OGCA staff to present a comprehensive overview of the proposed

project to the approximately 30 attendees. Many valuable suggestions were received from the residential abutters and Massport agreed to consider the comments and return to a similar meeting with the results. In addition, the State Representative urgently requested that Massport conduct a repeat meeting for local residents who may not have attended due to the record snowstorm two days prior. Massport immediately agreed, citing its intent to have a series of meeting on the NSA project designed to solicit input from many different segments of the East Boston community.

On February 8, 2005, Massport held a second meeting for which it placed a ¼ page ad in the East Boston newspaper the week prior to the community-wide forum. Mailed invitations were sent to the abutting neighbors and previous meeting attendees, and a number of community leaders were contacted by phone about the meeting. Massport mailed approximately 400 NSA information packets to East Boston residents and invitations were extended to all public officials. Revisions to the proposed NSA plans based on community suggestions from the first meeting were presented, and extensive discussion regarding the traffic impacts of the project, as well as existing airport related traffic problems were discussed in great depth. Approximately 55 local residents and elected officials attend this second meeting.

Opportunities for community involvement will continue through the extended MEPA review of this Expanded ENF.

9.0 ENF Distribution

This Environmental Notification Form has been distributed to Federal, state, and city agencies and to parties listed in this Appendix. The list includes those entities that the *Massachusetts Environmental Policy Act* (MEPA) requires as part of the review of the document; representatives of governmental agencies; and interested individuals and community groups.

Printed copies of the ENF may be requested from Stewart Dalzell, Deputy Director Aviation Planning and Development, Massport, Suite 200 South, Second Floor, Logan Office Center, One Harborside Drive, East Boston, MA 02128, telephone (617) 568-3507, e-mail: sdalzell@massport.com.

Printed copies of this ENF are available for review at the following public libraries:

Libraries		
Boston Public Library East Boston Branch 276 Meridian Street East Boston, MA 02128	Boston Public Library Orient Heights Branch 18 Barnes Avenue East Boston, MA 02128	State Transportation Library Public Review 10 Park Plaza Boston, MA 02116-3973
Winthrop Public Library One Metcalf Square Winthrop, MA 02151		
Federal Government		
U.S. Senators and Representatives U.S. Representative Michael E. Capuano 110 First Street Cambridge, MA 02141	Federal Aviation Administration John Silva, Mgr. Environmental Programs Department of Transportation Federal Aviation Administration New England Region 12 New England Executive Park, Box 510 Burlington, MA 01803	
State Government		
Senate/House of Representatives		
Senate President Robert Travaglini Massachusetts State House, Room 232 Boston, MA 02133	Senator Steven Baddour Massachusetts State House, Room 513 Boston, MA 02133	Senator Jarrett T. Barrios Massachusetts State House, Room 513 Boston, MA 02133
Speaker Salvatore DiMasi Massachusetts State House, Room 356 Boston, MA 02133	Representative Robert A. DeLeo Massachusetts State House, Room 20 Boston, MA 02133	Representative Eugene L. O'Flaherty Massachusetts State House, Room 479 Boston, MA 02133
Representative Anthony Petruccelli Massachusetts State House, Room 166 Boston, MA 02133	Representative Joseph C. Wagner Massachusetts State House, Room 443 Boston, MA 02133	
Executive Office of Environmental Affairs		
James Stergios, Undersecretary for Policy c/o Nancy Gabriel-Sakie Executive Office of Environmental Affairs 100 Cambridge St, Suite 900 Boston, MA 02114	James Hunt, MEPA Director Executive Office of Environmental Affairs 100 Cambridge St, Suite 900 Boston, MA 02114	Anne Canaday, Environmental Analyst Executive Office of Environmental Affairs 100 Cambridge St, Suite 900 Boston, MA 02114
Department of Environmental Protection		
Robert Gollege, Commissioner Department of Environmental Protection 1 Winter St. Boston, MA 02108	MEPA Coordinator Northeast Regional Office Department of Environmental Protection 1 Winter St. Boston, MA 02108	James Sprague, Section Chief Wetlands and Waterways - NERO Department of Environmental Protection 1 Winter St. Boston, MA 02108

State Government (Continued)		
MA Water Resources Authority Attn: MEPA Coordinator Mass. Water Resources Authority Charlestown Navy Yard 100 First Avenue Charlestown, MA 02129	MA Historical Commission The MA Archives 220 Morrissey Boulevard Boston, MA 02125	Coastal Zone Management Project Review Coordinator Massachusetts Coastal Zone Management Office, EOE 251 Causeway St. Suite 900 Boston, MA 02114-2119
Executive Office of Transportation Environmental Reviewer Executive Office of Transportation 10 Park Plaza, Suite 3170 Boston, MA 02116	MA Aeronautics Commission MEPA Coordinator Mass. Aeronautics Commission 10 Park Plaza, Room 6620 Boston, MA 02116	MA Bay Transportation Authority Andrew P. Brennan Manager of Environmental Affairs Mass. Bay Transportation Authority 10 Park Plaza, Room 3910 Boston, MA 02116
MA Highway Department Kevin Walsh, MEPA/NEPA Coordinator Massachusetts Highway Department 10 Park Plaza, Room 4260 Boston, MA 02116	MA Highway Department Attn: MEPA Coordinator 519 Appleton Street Arlington, MA 02171	Metropolitan Area Planning Council Steve McGoldrick, Deputy Executive Director Metropolitan Area Planning Council 60 Temple Place, 6 th Floor Boston, MA 02111
MA Executive Office of Health and Human Services Suzanne Condon Dir., Bureau of Environmental Health Assessment, EOH&HS 250 Washington Street, 7 th Floor Boston, MA 02108		
Massachusetts Port Authority Board of Directors		
John A. Quelch, Board Chairman Massachusetts Port Authority One Harborside Drive East Boston, MA 02128-2909	Susana Segat, Board Member Massachusetts Port Authority One Harborside Drive East Boston, MA 02128-2909	Lois J. Catanzaro, Board Member Massachusetts Port Authority One Harborside Drive East Boston, MA 02128-2909
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Municipalities		
City of Boston		
Office of the Mayor Thomas Menino, Mayor City of Boston One City Hall Square Boston, MA 02201	Boston Redevelopment Authority Richard Mertens, Director of Special Project Planning Boston Redevelopment Authority One City Hall Square, Room 959 Boston, MA 02201	Boston Public Health Commission John Auerbach, Executive Director Boston Public Health Commission 1010 Massachusetts Avenue Boston, MA 02118
Boston Transportation Department Commissioner Boston Transportation Department One City Hall Square, Room 721 Boston, MA 02201	Boston Environment Department Bryan Glascock, Acting Director Boston Environment Department One City Hall Square, Room 805 Boston, MA 02201	Boston Parks and Recreation Dept. Commissioner Boston Parks and Recreation Dept. 1010 Massachusetts Avenue Boston, MA 02118
Boston Air Pollution Control Commission Bryan Glascock, Director Boston Air Pollution Control Commission One City Hall Square, Room 805 Boston, MA 02210	Environmental Services Cabinet Nancy Grille Environmental Services Cabinet City Hall, Room 603 Boston, MA 02201	Boston Water and Sewer Commission Vincent G. Mannering, Executive Director Boston Water and Sewer Commission 980 Harrison Avenue Boston, MA 02119
City Clerk's Office Rosario Salerno Boston City Clerk One City Hall Square Boston, MA 02201	Boston City Council Michael Flaherty, Council President Boston City Council Boston, City Hall Boston, MA 02201	Boston City Council Paul J. Scapicchio, District Councilor Boston City Council Boston, City Hall Boston, MA 02201

Municipalities		
City of Chelsea Jay Ash, City Manager Chelsea City Hall 500 Broadway Chelsea, MA 02150	Town of Winthrop Board of Selectmen Winthrop Town Hall One Metcalf Square Winthrop, MA 02152	
Community Groups and Interested Parties		
East Boston Community		
Thomas Briand, President E. Boston Residents & Homeowners Assoc. 83 Byron Street East Boston, MA 02128	Thomas Bruno Orient Heights Assoc. 56 Beachview Road East Boston, MA 02128	Robert Loiacono East Boston Chamber of Commerce 296 Bennington Street East Boston, MA 02128
Joe Mason East Boston Land Use Council 44 Everett St. East Boston, MA 02128	Mr. Joseph Steffano, Chairman EB Foundation 2 Swift Terrace East Boston, MA 02128	Karen Maddalena Jeffries Point Neighborhood Assoc. 4 Lamson St. East Boston, MA 02128
Karen Buttiglieri Sen. President Travaglini's Office State House- Rm. 330 Boston, MA 02133	Sgt. Mike O'Conner Boston Police 69 Paris Street East Boston, MA 02128	Rev. Richard Crager Salesians Boys & Girls Club 189 Paris Street East Boston, MA 02128
Sal LaMattina 76 Montmorenci Ave. East Boston, MA 02128	Arthur and Roberta Horn 65 St. Andrew Road East Boston, MA 02128	James Sostek 88 Moore St. East Boston, MA 02128
Joan Corrado 164 Bayswater Street East Boston, MA 02128	Francis and Carol Emmett 9 Swift Terrace East Boston, MA 02128	Philomena Keane 449 Frankfort St. East Boston, MA 02128
Joanne Donatelli 675 Bennington Street East Boston, MA 02128	Fran Rowan 7 Thurston Street East Boston, MA 02128	Bernadine Joslin 71 Liverpool Street East Boston, MA 02128
Lillian Snyder 433 Frankfort St. East Boston, MA 02128	M. Johnson 14 Wordsworth Street East Boston, MA 02128	Rosa Mese 447 Frankfort Street East Boston, MA 02128
Raffaella Pizzi 670 Bennington St. East Boston, MA 02128	Joanne T. Pomodoro 683 Bennington St. East Boston, MA 02128	Maria & Sean Nissen 623 Bennington St. East Boston, MA 02128
Lucille Drago 58 Wordsworth Street East Boston, MA 02128	James Aloisi 204 Chelsea Street East Boston, MA 02128	Lillian Snyder 433 Frankfort St. East Boston, MA 02128
Ray Pizzano 212 Bennington Street East Boston, MA 02128	Paul Riggi 93 Prescott Street East Boston, MA 02128	Christopher Blacker 2 Webster Avenue Boston, MA 02128
Tom Bruno 21 Annavoy Street East Boston, MA 02128	Carol Harrison 237 Trenton Street East Boston, MA 02128	Ms. Gail Miller 232 Orient Ave. East Boston, MA 02128
Ron Hardaway 118 Bayswater Street East Boston, MA 02128	Edward and Jayne Courier 445 Bennington Street East Boston, MA 02128	Mary Berninger 156 St. Andrew Road East Boston, MA 02128
Helen LePage 27 Swift Terrace East Boston, MA 02128	Mr. Robert D'Amico 300 Maverick St. East Boston, MA 02128	Lorene Schettino City Councilor Paul Scapicchio, City Hall East Boston, MA 02128
Corinne Barisano 10 Horace Street East Boston, MA 02128	T.J. Synder, Jr. 19 Swift Terrace East Boston, MA 02128	Martin Forgone 466 Frankfort Street East Boston, MA 02128
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